PENDING CLAIMS AS AMENDED

Please amend the claims as follows:

1.   (Currently Amended) A spread-spectrum communications apparatus, comprising:

a scheduler configured to maintain a plurality of spreading sequence assignments and a plurality of available spreading sequences each being orthogonal to the assigned spreading sequences, the scheduler further being configured to select a spreading sequence from a group of the available spreading sequences having the same length, the selected spreading sequence being generated from a block of codes and being selected based on the number of the available spreading sequences that can be generated using the same block of codes, wherein each of the available spreading sequences in the group is generated from a different block of codes, and wherein the scheduler is further configured to select the spreading sequence having the lowest number of the available spreading sequences that can be generated using its respective block of codes.

2.   (Cancelled)

3.   (Currently Amended) The apparatus of claim 1 wherein the spreading sequence is selected by the scheduler to support transmissions over a communications channel, and wherein the scheduler is further configured to determine the group of the available spreading sequences by first determining [[the]] a length based on the capacity of the communications channel and then assigning all the available spreading sequences having the length to the group.

4.   (Original) The apparatus of claim 1 wherein the selected spreading sequence comprises a sequence common with a portion from each of the codes from the block.

5.   (Original) The apparatus of claim 1 wherein the codes each comprises a Walsh code.

6.   (Original) The apparatus of claim 1 wherein each of the available spreading sequences in the group is generated from a different block of codes, and wherein the scheduler is further configured to identify an available spreading sequence with the shortest length among all available spreading sequences, the selected spreading sequence being one of the spreading sequences from the group whose block of codes from which it is generated is not used to generate the identified spreading sequence.

7.   (Original) The apparatus of claim 1 further comprising a selector element configured to spread communications intended for a wireless device with the selected spreading sequence.

8.   (Currently Amended) A spread-spectrum communications apparatus, comprising:

a scheduler configured to maintain a plurality of spreading sequence assignments and a plurality of available spreading sequences each being orthogonal to the assigned spreading sequences, the scheduler further being configured to identify an available spreading sequence having the shortest length among all available spreading sequences, determine a target length and compare it to the length of the identified spreading sequence, and select an available spreading sequence based on the comparison, wherein the identified spreading sequence is generated from a block of codes, and if the target length is less than the length of the identified spreading sequence, the scheduler is further configured to remove from the available spreading sequences those spreading sequences that can be generated from at least one of the codes from the block, and select the spreading sequence from the remaining available spreading sequences if at least one of the remaining available spreading sequences has a length equal to the target length.

9.   (Original) The apparatus of claim 8 wherein the selected spreading sequence comprises a length greater than or equal to the target length.

10. (Currently Amended) The apparatus of claim 8 wherein the scheduler is further configured to select the identified spreading sequence as the selected spreading sequence if the target length is [[less]] greater than or equal to the length of the identified spreading sequence.

11. (Cancelled)

12. (Currently Amended) The apparatus of claim 8 wherein the identified spreading sequence is generated from a block of codes, and if the target length is greater less than the length of the identified spreading sequence, the scheduler is further configured to remove from the available spreading sequences those spreading sequences that can be generated from at least one of the codes from the block, and select one of the removed spreading sequences if none of the remaining available spreading sequences have a length equal to the target length.

13. (Original) The apparatus of claim 8 wherein the spreading sequence is selected by the scheduler to support transmissions over a communications channel, and wherein the scheduler is further configured to determine the target length by measuring the capacity of the communications channel.

14. (Currently Amended) A spread-spectrum communications apparatus, comprising:
means for maintaining a plurality of spreading sequence assignments and a plurality of available spreading sequences each being orthogonal to the assigned spreading sequences; and
selection means for selecting a spreading sequence from a group of the available spreading sequences having the same length, the selected spreading sequence being generated from a block of codes and being selected based on the number of the available spreading sequences that can be generated using the same block of codes, wherein each of the available spreading sequences in the group is generated from a different block of codes, and wherein the selection means selects the spreading sequence having the lowest number of the available spreading sequences that can be generated using its respective block of codes.

15. (Cancelled)

16.   (Currently Amended) The apparatus of claim 14 wherein the spreading sequence is selected to support transmissions over a communications channel, the apparatus further comprising means for determining the group of the available spreading sequences by first determining [[the]] a length based on the capacity of the communications channel and then assigning all the available spreading sequences having the length to the group.

17.   (Original) The apparatus of claim 14 wherein the selected spreading sequence comprises a sequence common with a portion from each of the codes from the block.

18.   (Original) The apparatus of claim 14 wherein the codes each comprises a Walsh code.

19.   (Original) The apparatus of claim 14 wherein each of the available spreading sequences in the group is generated from a different block of codes, the apparatus further comprising means for identifying an available spreading sequence with the shortest length among all available spreading sequences, the selected spreading sequence being one of the spreading sequences from the group whose block of codes from which it is generated is not used to generate the identified spreading sequence.

20.   (Original) The apparatus of claim 14 further comprising means for spreading communications with the selected spreading sequence.

21.   (Currently Amended) A method of spread-spectrum communications, comprising:
        maintaining a plurality of spreading sequence assignments and a plurality of available spreading sequences each being orthogonal to the assigned spreading sequences; and
        selecting a spreading sequence from a group of the available spreading sequences having the same length, the selected spreading sequence being generated from a block of codes and being selected based on the number of the available spreading sequences that can be generated

using the same block of codes, wherein each of the available spreading sequences in the group is generated from a different block of codes, and wherein the scheduler is further configured to select the spreading sequence having the lowest number of the available spreading sequences that can be generated using its respective block of codes.